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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,364	08/25/2003	Paul Richard Blais	H-732-0-US	2123

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HUSKY INJECTION MOLDING SYSTEMS, LTD
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CANADA

EXAMINER

KIM, CHRISTOPHER S

ART UNIT	PAPER NUMBER
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3752

MAIL DATE	DELIVERY MODE
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02/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/647,364	Applicant(s) BLAIS, PAUL RICHARD	
	Examiner Christopher S. Kim	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-71 is/are pending in the application.
- 4a) Of the above claim(s) 49-57 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 70 and 71 is/are allowed.
- 6) ☒ Claim(s) 58-63 and 65-68 is/are rejected.
- 7) ☒ Claim(s) 64 and 69 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. The response filed November 30, 2007 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

3. Claims 49-57 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 8, 2007.
4. Applicant's election of Group II in the reply filed on March 8, 2007 remains in effect.
5. Applicant's election of Species A, figure 1 and Subspecies aa, figure 4 in the reply filed on May 4, 2005 remains in effect.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "heater" recited in claim 63 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

7. Claims 58-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarzkopf (5,573,185) in view of Gunther (6,022,210).

First reading of Schwarzkopf.

Regarding claims 58-61, Schwarzkopf discloses a nozzle tip comprising:

a tip retainer 7 comprising:

a first end region (upstream end);

- a second end region (at 12);
- a central bore;
- a seal ring 9;
- a weld 12.

Schwarzkopf does not disclose that seal ring 9 comprises a material having a lower thermal conductivity than the tip retainer 7. Various materials having different thermal conductivity are well known in the art.

Gunther teaches an insulating cap 53 over a titanium shaft foot 48 which is at the end of housing 12.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have made the seal ring 9 of Schwarzkopf with a thermal conductivity lower than the tip retainer 7 as taught by Gunther for heat insulation (decrease heat dissipation), ease in fabrication, prevent corrosion, etc.

Second reading of Schwarzkopf.

Regarding claims 58-63, Schwarzkopf discloses a nozzle tip comprising:

- a tip retainer 1 comprising:
 - a first end region 2;
 - a second end region (portion downstream of 3);
 - a central bore 5;
- a seal ring 9;
- a weld 13;
- a circumferential groove (space accommodating heater 6;

a heater 6;

a tip insert 4

Schwarzkopf does not disclose that seal ring 9 comprises a material having a lower thermal conductivity than the tip retainer 1. Various materials having different thermal conductivity are well known in the art.

Gunther teaches an insulating cap 53 over a titanium shaft foot 48 which is at the end of housing 12.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have made the seal ring 9 of Schwarzkopf with a thermal conductivity lower than the tip retainer 1 as taught by Gunther for heat insulation (decrease heat dissipation), ease in fabrication, prevent corrosion, etc.

8. Claims 58-62, 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinehr et al. (4,714,045) in view of Moakes et al. (5,947,143) and Gunther (6,022,210).

Reinehr discloses a nozzle tip comprising:

a tip retainer (element upstream of perforated ring 8);

a seal ring (element downstream of perforated ring 8).

Reinehr differs from what is being claimed in the seal ring having a lower thermal conductivity than the tip retainer and the seal ring being welded to the tip retainer.

Various materials having different thermal conductivity are well known in the art. Gunther teaches an insulating cap 53 over a titanium shaft foot 48 which is at the end of housing 12.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have made the seal ring of Reinehr with a thermal conductivity lower than the tip retainer as taught by Gunther for heat insulation (decrease heat dissipation), ease in fabrication, prevent corrosion, etc.

Moakes teaches, in column 6, lines 1-13, the interchangeability of fasteners and welds. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have replaced the fastening means of Reinehr with welds as taught by Moakes for simplicity and permanence.

Response to Arguments

9. Applicant's arguments filed November 30, 2007 have been fully considered but they are not persuasive.

Gunther is offered as evidence that use of materials with lower thermal conductivity for insulation is well known.

Allowable Subject Matter

10. Claims 64 and 69 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 70 and 71 are allowed.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Christopher S. Kim/
Primary Examiner, Art Unit 3752

CK